•	6	P	À (							PECEL WCNIER 1800/200		
'	1.	C 2 7 20	m #3					Complete if Knowl	7	CA		
	<b>\</b>		₹/		App	olica	tion Number	09/840,125	RO	W. 4.C. 1	么	
			SČLOS APPLIC		Filir	ng D	ate	24 April 2001		CENTE 200	,~~	
SIA	EMEN	II DI	APPLIC	AINI	First Named Inventor			Igor SPLAWSKI et al.				
					Gro	oup A	Art Unit	1055-1634				
							er Name					
Sheet		1	of 9				Docket Number	2323-158				
				ι	J.S. P	ATE	NT DOCUMENTS					
Examiner Initials*	Cite No.		U.S. Pate		nd Coc			entee or Applicant d Document		Date of Publication of Cited Document MM-DD-YYYY	t	
mittals	140.	5 500	270	(6	f known)		Keating et al.			02/04/1997		
90	ļ	5,599,6		+		Reating et al.	Saurig et al. 02/04/19					
<u> </u>		<del>                                     </del>			+							
		ļ			+			····				
			,						_			
,		ļ			-							
		<u> </u>			Щ.							
						N PA	TENT DOCUMEN	rs ————				
Examiner Initials*	Cite	Office	Foreign F	Patent Docu Number	Kind		Name of Patent	te of Publication of Cited Document MM-DD-YYYY	T⁵			
<i>a</i> n		wo	97/235	598	(II KN	iown)	University of Uta			7/03/1997		
F			+			+	Foundation		-		⊢	
-			+			+			-		<del> </del>	
						+			-		-	
		<u> </u>	┼			+			-		-	
		-				+	<del> </del>		├-			
Examiner Signature		Och	anne	Sova	ya			Date Considered	9/	22/03	Щ	

EXAMINER: Initial if reference considered, whether or not dilation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*See attached Kinds of U.S. Patent Documents. \*Enter Office that issued the document, by the two-letter code. \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 I possible. \*Applicant is to place a check mark here if English language a translation is attached. All indicates that only an English language abstract is attached.

•	CIF	E					PROCE				
ı	nrc	2 7 2001			Comprete if K	nown	PA-				
	\	\$		Application Number	09/840,125		~,CX	٧.			
		ON DISCLO		Filing Date	24 April 200	1 FC	400	仅			
SIAI	EMEN	T BY APPL	ICANI	First Named Inventor	Igor SPLAV	/SKI et al.	ENTO 20	20-			
				Group Art Unit	1655-1634		16nn	<u>~</u>			
				Examiner Name			N/S	W			
Sheet		2 of	9	Attorney Docket Number	2323-158						
		OTHE	R PRIOR ART	- NON PATENT LITERATE	JRE DOCUME	NTS					
Examiner Initials* Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Initials* No. Indicate the Initials* Initials* Indicate the Initials* Indicate								T <sup>2</sup>			
op			BRIEL, H. et al., "Molecular Pharmacology of the Sodium Channel Mutqtion D1790G Linked the Long-QT Syndrome," Circulation 102(8):921-925, 2000.								
	ACKERMAN, M.J. "The Long QT Syndrome: Ion Channel Diseases of the Heart", Mayo C Proc., 1998; 73:250-269										
		ACKERMAN, M.J. et al. "Molecular Diagnosis of the Inherited Long-QT Syndrome in a Woman Who Died After Near-Drowning", N. Engl. J. Med., Oct. 7, 1999; 341(15):1121-11									
		ACKERMAN, M.J. et al. "A Novel Mutation in KVLQT1 is the Molecular Basis of Inherited Long QT Syndrome in a Near-Drowning Patient's Family", Pediatr. Research, 1998; 44(2):148-153									
				CN5A mutation associated was of Brugada syndrome", F			orillation				
		al RAKAF, Arabia, <i>Int</i>	M. et al., "Jerv I. J. of Pediatr	vell and Lange-Nielsen QT s ic Otorhinolaryngology 39:16	yndrome: a ca 33-168, 1997.	se report fro	m Saudi				
		AN, R.H. et Between α-	al. "Novel LQ and β <sub>1</sub> -Subu	T-3 Mutation Affects Na <sup>+</sup> Chrits", Circ. Res., 1998; 83:14	annel Activity 1-146	Through Inte	eractions				
			enotypes whe	I5A mutation (T1620M) caus n expressed in <i>Xenopus</i> ood							
				entification of a New SCN5A . Mutat. 12(1):72, 1998.	Mutation D184	10G, Associa	ated With the				
				ects of Flecainide in Patients g-QT Syndrome?", Circulation			n. Mutation-				
	BENHORIN, J. et al. "Evidence of Genetic Heterogeneity in the Long QT Syndrome", Science, June 25, 1993; 260:1960-1962										
			P.B. et al. "Me 95; 376:683-6	olecular mechanism for an ir 85	herited cardia	c arrhythmia	", Nature,				
Ţ		BEZZINA, C Syndromes	C. et al. "A Sin ", <i>Circ. Res.</i> , 1	gle Na* Channel Mutation Ci 1999; 85:1206-1213	ausing Both Lo	ong-QT and	Brugada				
Examiner	9	el an m	Sona	10	Date	9/2	2/02				

Signature "PAWW STWWL Considered Treferenc considered, whetherfor not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Vunique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

		- E							
	<del>7</del>	- 1			Complete if Known	<b>%</b>			
,	DEC	2 7 2001		Application Number	09/840,125	~ <u>```</u>			
INFOR	PLANT	DI DISTELOS	URE	Filing Date	24 April 2001 C/	Ca V	_		
STATI	EMENT	BYAPPLIC	CANT	First Named Inventor	Igor SPLAWSKI et al	700 200 C	)		
				Group Art Unit	-1655-1634	18000			
				Examiner Name	09/840,125 24 April 200 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4				
Sheet		3 of	9	Attorney Docket Number	2323-158		_		
		OTHER	PRIOR ART	- NON PATENT LITERATU	IRE DOCUMENTS		_		
Examiner Initials*	Cite No.			thor (in CAPITAL LETTERS), title of urnal, serial, symposium, catalog, el publisher, city and/or country wi	c.), date, page(s), volume-issu		Γ²		
9				pe variation and newcomers 7; 6(10):1679-1685	in ion channel disorders"	, Human			
1				basis and molecular mechar 19, 1998; 392:293-296	nism for idiopathic ventric	cular			
				gous Deletion in KVLQT1 As lation, 1999; 99:1344-1347	sociated with Jervell and	Lange-			
		CHOUABE, C	CHOUABE, C. et al. "Novel mutations in KvLQT1 that affect I <sub>ks</sub> activation through interactions with Isk". Cardiovascular Research, 2000; 45:971-980.						
			inge-Nielsei	perties of KvLQT1 K* channe n inherited cardiac arrhythmia					
				king a genetic defect to its ce 5, 1999; 400:566-569	llular phenotype in a card	diac			
		COONAR, A. Genetics, 199		lecular Genetics of Familial ( 24	Cardiomyopathies", Adva	ances in			
		CURRAN, M.	et al. "Locu 1993; 92:79	s Heterogeneity of Autosoma 9-803	al Dominant Long QT Syr	ndrome", J.			
		DE JAGER, T in South Africa	. et al. "Evid an families"	lence of a long QT founder g J. Med. Genet., 1996; 33:56	ene with varying phenoty 7-573	pic expression			
			34K) and Br	ectrophysiological characteri ugada (R1512W and R1432 5					
				QT1 C-Terminal Missense Mi n, 1997; 96:2778-2781	utation Causes a Forme	Fruste Long-			
V				Mechanisms Responsible for Are Temperature Depender					
Examiner Signature	9	harve	Some		Date Considered 9/3	2/03			

Signature

EXAMINEE: Initial if reference considered, whether optool citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Vinique citation designation number. 'Applicant is to place a check mark here if English language Translation is attached.

•	ج د ر	E			- 0	_	PECKI VER 100/2007		
	70		<i>-)</i>			Complete if K	nown 🔊		
(	DEC	2 7 200	\$ P		Application Number	09/840,125	TEC.		
			SELOS		Filing Date	24 April 200	1 OF 5/16		
STATE	-MEN	BY	ÄPPLIC	ANI	First Named Inventor	Igor SPLAV	VSQ49 28 5	5	
					Group Art Unit	1655-/63	4 NIED VOT		
					Examiner Name		1600/20-		
Sheet	T	4	of	9	Attorney Docket Number	2323-158			
			OTHER F	PRIOR ART	- NON PATENT LITERAT				
Examiner Initials*	Cite No.		Include r item (book	ame of the au , magazine, jo	othor (in CAPITAL LETTERS), title of burnal, serial, symposium, catalog, of publisher, city and/or country w	etc.), date, page(s	n appropriate), title of the s), volume-issue number(s),	T <sup>2</sup>	
P		KvLC Biolo	FRANQUEZA, L. et al. "Long QT Syndrom-easociated Mutations in the S4-S5 Linker of KvLQT1 Potassium Channels Modify Gating and Interaction with minK Subunits", J. Biological Chemistry, July 23, 1999; 274(30):21063-21070; J. Biological Chemistry, Aug. 27, 1999; 274(36):25188						
		GEO Na* o	RGE, A.I	et al. "As -subunit ge	signment of the human hear ene (SCN5A) to band 3p21",	t tetrodotoxin- Cytogenet. C	resistant voltage-gated cell Genet., 1995; 68:67-70		
			HOFFMAN, E.P. et al. "Ion Channels - Molecular Divining Rods Hit Their Clinical Mark", N. Engl. J. Med., May 29, 1997; 336(22):1599-1600						
		frequ	IWASA, H. et al. "Twenty single nucleotide polymorphisms (SNPs) and their allelic frequencies in four genes that are responsible for familial long QT syndrome in the Japanese population," <i>J. Hum. Genet.</i> , 2000; 46(3):182-183.						
		ITOF respo	I, T. et al. onsible fo	"Genomic r familial lo	organization and mutational ng QT syndrome", <i>Hum. Ge</i>	analysis of Kinet., 1998; 10	VLQT1, a gene 3:290-294		
					., "Novel KCNQ1 and HERG 3(4):301-310, 1999.	Missense Mu	ations in Dutch Long-QT		
		KAM QT s	BOURIS, yndrome	N.G. et al. , J. Clin. In	"A revised view of cardiac s vest., 2000; 105:1133-1140	odium channe	el "blockade" in the long-		
		KAM Muta	BOURIS, tion (R16	N.G. et al. 23Q) in the	"Phenotypic Characterization Charles Cardiac Sodium Channel",	n of a Novel L Circulation, 19	ong-QT Syndrome 998; 97:640-644		
		KAN' with	TERS, J. Long QT	K. et al., "N Syndrome,	ovel Donor Splice Site Muta " J. Cardiovasc. Electrophy.	tion in the KVI siol. 9(6):620-	LQT1 Gene is Asociated 624, 1998.		
T					sistent Linkage of the Long- 1", Am. J. Hum. Genet., 199				
		KEA <sup>*</sup> Sten	TING, M.	T. "Genetic ams Syndr	Approaches to Cardiovascuome, and Long-QT Syndron	lar Disease. ne", Circulation	Supravalvular Aortic n, 1995; 92:142-147		
		KEA Harv	TING, M. ey ras-1 (	et al. "Linka Gene", Scie	age of a Cardiac Arrhythmia nnce, May 3, 1991; 252:704-	, the Long QT 706	Syndrome, and the		
7		KEA <sup>-</sup> Card	TING, M. iovascula	et al. "Linka r Disease",	age Analysis and Long QT S Circulation, 1992; 85:1973-	syndrome. Us 1986	ing Genetics to Study		
Examiner Signature		Je1	lan	re do	maya	Date Considered	9/22/03		

Signature YEAGAM JOUAYA Considered 1/33/03

\*EXAMINER: Initial if reference considered, whether or not obtain is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*Applicant is to place a check mark here if English language Translation is attached.

1	<b>√0`</b>	ρĒ	ve)		_	_				
	1	272	m 🔛 🛚		Application Number 09/840,125  Filing Date 24 April 2001  First Named Inventor Igor SPLAWS 16 16 16 16 16 16 16 16 16 16 16 16 16					
	1				Application Number	09/840,125	"CEIL			
INFOF	RMATIC	DN DI	SCLOS	URE	Filing Date	24 April 200	DEC OF VE	'n		
SIAII	CIVICIA	19-1-7	APPLIC	ANI	First Named Inventor	Igor SPLAV	Skit CHAIN 2001	_		
					Group Art Unit	1655 /634	I FR 16000			
					Examiner Name		OEC 28 2001 SECHO DENTER 1600/2800			
Sheet		5.	of	9	Attorney Docket Number	2323-158				
		(	OTHER F	RIOR ART	- NON PATENT LITERATU	JRE DOCUME	ENTS			
Examiner   Cite   Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, calalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published								T <sup>2</sup>		
KEATING, M.T. "The Long QT Syndrome. A Review of Recent Molecular Genetic: Physiologic Discoveries", Medicine, 1996, 75(1):1-5							lecular Genetic and			
1				J, B. et al. " 994; 47:189	The Jervell and Lange-Niels -192	en syndrome"	, International Journal of			
					ovel mutation in KVLQT1, L1 ome", Am. Heart J., 2000; 14		a family with autosomal			
		KUBOTA, T. et al., "Hypokalemia-Induced Long QT Syndrome with an Underlying Novel Missense Mutation in S4-S5 Linker of KCNQ1," <i>J. Cardlovasc. Electrophysiol.</i> 11(9):1048-1054, 2000.								
		LARSEN, L.A. et al. "A single strand conformation polymorphism/heteroduplex (SSC method for detection of mutations in 15 exons of the KVLQT1 gene, associated with syndrome", Clinica Chimica Acta, 1999; 280:113-125								
		by Au	itomated	Capillary E	h-Throughput Single-Strand lectrophoresis: Robust Multi riants", <i>Human Mutation</i> , 199	plex Analysis	and Pattern-Based			
		LARS heten 1999.	ozygosity	et al., "Red for two mu	cessive Romano-Ward synd tations in the KVLQT1 Gene	rome associat e," <i>Eur. J. Hun</i>	ed with compound n. Genet. 7(6):724-728,			
	LEE, M.P., et al. "Human KVLQT1 gene shows tissue-specific imprinting and encompasse Beckwith-Wiedemann syndrome chromosomal rearrangements", <i>Nature Genetics</i> , Feb. 1997; 15:181-185  LI, H. et al. "New Mutations in the KVLQT1 Potassium Channel That Cause Long-QT Syndrome", <i>Circulation</i> , 1998; 97:1264-1269									
		MAKI β <sub>1</sub> -Su	TA, N. et bunit'', C	t al. "Cardia irculation, 2	ic Na <sup>+</sup> Channel Dysfunction i 2000; 101:54-60	n Brugada Sy	ndrome is Aggravated by			
		MAKI	TA, N. et molecula	al. "A de n ar mechani	ovo missense mutation of his sms of long QT syndrome", i	uman cardiac FEBS, 1998; 4	Na⁺ channel exhibiting 123:5-9			
Ţ.			NENS, M 3-115	. et al. "KV	LQT1, the rhythm of imprinting	ng", Nature Ge	enetics, Feb. 1997;			
Examiner		anl		. 1.		Date	9/22/03			

Signature Yehous Squado Considered 9/22/03

\*EXAMINER: Initial if reference considered, whether or not glation is in conformance with MPEP 609. Draw line through diation if not in conformance and not considered. Include copy of this form with next communication to applicant.

'Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

ı	,	PE	J. 87								
	DE	£ 27	2001			Comprete if Known					
,	13		, 5		Application Number	09/840,125					
			SCLOS		Filing Date	24 April 2001					
SIAIE	INENI	BY	APPLIC	ANI	First Named Inventor	Igor SPLAWS et al.	5				
					Group Art Unit	1855 16 34 CHCAIN 8 200	O				
					Examiner Name	ERIGO					
Sheet	6		of	9	Attorney Docket Number	Complete if Known  09/840,125  24 April 2001  Igor SPLAWST et al. Complete in 1655   1/2 34					
			OTHER I	PRIOR ART	- NON PATENT LITERATI	JRE DOCUMENTS					
Examiner Initials*	Cite No.		Include r item (book	name of the au , magazine, jo	thor (in CAPITAL LETTERS), title o urnal, serial, symposlum, catalog, e publisher, city and/or country w	of the article (when appropriate), title of the stc.), date, page(s), volume-issue number(s), here published	T²				
90		MAR	X, J. "Ra	re Heart Di	sease Linked to Oncogene",	Research News, May 3, 1991; p. 647	Γ				
1		MOH Phen	IAMMAD notype in	-PANAH, R Inherited C	et al. "Mutations in a Domir ardiac Arrhythmias", <i>Am. J. I</i>	nant-Negative Isoform Correlate with Hum. Genet., 1999; 64:1015-1023					
		MUR	JURRAY, A. et al. "Splicing Mutations in KCNQ1. A Mutation Hot Spot at Codon 344 That Produces in Frame Transcripts", Circulation, 1999; 100:1077-1084								
		Indu	NAPOLITANO, C. et al., "Evidence for a Cardiac Ion Channel Mutation Underlying Drug- nduced OT Prolongation and Life-Threatening Arrhythmias," J. Cardiovasc. Electrophysiol 11(6):691-696. 2000.								
		NEY! Jerve	ROUD, N	l. et al. "A n nge-Nielse	ovel mutation in the potassiun cardioauditory syndrome",	um channel gene KVLQT1 causes the Nature Genetics, Feb. 1997;15:186-189					
		caus	es an ap	l. et al. "Hel parently no 8; 6:129-13	mal phenotype in long QT s	ore of potassium channel gene KvLQT1 yndrome", <i>European Journal</i> of Human					
		NEYROUD, N. et al. "Genomic Organization of the KCNQ1 K" Channel Gene and Identification of C-Terminal Mutations in the Long-QT Syndrome", Circ. Res., 1999; 84:290-297									
		PEREON, Y. et al. "Differential expression of KvLQT1 isoforms across the human ventricula wall", Am. J. Physiol. Heart Circ. Physiol., 2000; 278:H1908-H1915									
	-	PRIC 77:5-		long QT s	yndrome entering the era of	molecular diagnosis?", Heart, 1997;					
				et al. "A Re 98; 97:242		ano-Ward Long-QT Syndrome?",					
		ROD Long	EN, D.M. QT Synd	et al. "Rec	ent Advances in Understand Cardiovasc. Electrophysiol., N	ling the Molecular Mechanisms of the Nov. 1995; 6:1023-1031					
							_				

Sovalla Considered Signature \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ROMEY, G. et al. "Molecular Mechanism and Functional Significance of the MinK Control of the KvLQT1 Channel Activity", J. Biological Chemistry, July 4, 1997; 272(27):16713-16716 ROOK, M.B. et al. "Human SCN5A gene mutations after cardiac sodium channel kinetics and are associated with the Brugada syndrome", Cardiovascular Research, 1999; 44:507-517

Date

'Unique citation designation number. 'Applicant is to place a check mark here if English language Translation is attached.

Examiner

1		P	200						
	7		-3/			Complete if K	nown		
·	Ł. B	EC 27	2001		Application Number	09/840,125	nown  FECEN  11  DEC 2 8 20  14  VSWIEGH CENVER 1600/2		
			scros		Filing Date	24 April 200	01 050	10	
SIAIE	:MEN	I BY	PPLIC	ANI	First Named Inventor	Igor SPLAV	VSKIEGU 28 20	K	
					Group Art Unit	1855-163	Y CENTER!	97	
					Examiner Name		1600/2	900	
Sheet	T	7	of	9	Attorney Docket Number	2323-158		-	
		-	OTHER F	RIOR ART	- NON PATENT LITERATI	URE DOCUM	ENTS		
Examiner Initials*									
op				"Long QT : 3373-3375	Syndrome Patients with Ger	ne Mutations",	Circulation, Dec. 15,		
١					1 mutations in three families		or sporadic long QT		
		of the	SAARINEN, K. et al., "Molecular Genetics of the Long QT Syndrome: Two Novel Mutations of the KVLQT1 Gene and Phenotypic Expression of the Mutant Gene in a Large Kindred," hum, Mutat. 11(2):158-165, 1998.						
			SANGUINETTI, M.C. et al. "Coassembly of K <sub>v</sub> LCT1 and minK (IsK) proteins to form cardiac last potassium channel", Nature, Nov. 7, 1996; 384:80-83						
			SANGUINETTI, M.C. et al. "Potassium Channelopathies", Neuropharmacology, 1997; 36(6):755-762						
					essive C-terminal Jervell ar subunit assembly", The EME				
					diac conduction defects ass 999; 23:20-21	ociate with mu	utations in SCN5A",		
		SCHWARTZ, P.J. et al. "Long QT Syndrome Patients with Mutations of the SCN5A and HERG Genes Have Differential Responses to Na* Channel Blockade and to Increases in Heart Rate", Circulation, 1995; 92:3381-3386  SCHWARTZ, P.J. et al. "A Molecular Link Between the Sudden Infant Death Syndrome at the Long-QT Syndrome", N. Engl. J. Med., July 27, 2000; 343(4):262-267							
		SHAL Long	ABY, F.Y	/. et al. "Do rome", <i>Cir</i> c	minant-Negative KvLQT1 M ulation, 1997; 96:1733-1736	utations Unde	rlie the LQT1 Form of		
					ovement of Repolarization A ntial Long-QT Syndrome", C				
					cular Basis of the Long-QT 1997; 336(22):1562-1567	Syndrome As:	sociated with Deafness",		
A					omic Structure of Three Long comics, 1998; 51:86-97	g QT Syndron	ne Genes: KVLQT1,		
Examiner Signature		Jeh	an	e So	uaya	Date Considered	9/22/03		

EXAMINER: Initial if reference considered, whether or not cifetion is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Violuge citation designation number. "Applicant is to place a check mark here if English language Translation is attached.

. 1			4	PE								
			<b>/</b> 0`		<u>-2</u> )		Complete if Kr	nown				
		- {		C 2 7 200	34.1	Application Number	09/840,125	10.				
INF	ORM/	ATIO	MDI	SCLOS	UKE.	Filing Date	24 April 200	1 Dec C	11/2			
514	AIEM	ENI	BN	CA HADO	ANI	First Named Inventor	Igor SPLAW	SKI BOY CO	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
						Group Art Unit	1655/634	ENTER (	07			
					i	Examiner Name		2323-158				
Sheet	Sheet 8 of 9					Attorney Docket Number	2323-158		00			
				OTHER F	RIOR ART	- NON PATENT LITERATU						
Examine Initials*		ite No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where publisher, city and/or country where publisher.								
9	0					Novel KVLQT1 and Four Nov n, 1997; 95:565-567	vel HERG Mut	ations in Familial Long-				
			TOW Synd	/BIN, J.A. rome", C	et al. "Evid irculation, 1	lence of Genetic Heterogene 994; 90:2635-2644	eity in Romano	o-Ward Long QT				
			comp	SON, J. et al. "IsK and KvLQT1: mutation in either of the two subunits of the slow nponent of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen drome". Human Molecular Genetics, 1997; 6(12):2179-2185								
			TYS	ON, J. et	al. "Splice I	Mutations In KVLQT1?", Circ	ulation, 1999;	99(18):2476-2477	T			
						t al. "The long QT syndrome ne", Hum. Genet., 1997; 100		ense mutation in the S6				
						lecular Genetics of the Long th", Annu. Rev. Med., 1998;		e: Genes Causing				
			VINC	ENT, G.I	VI. "Genetic licine, 1994	s and Molecular Biology of to ; 26:419-425	he Inherited Lo	ong QT Syndrome",				
			WAN	IG, D.W. enital lon	et al. "Char g QT syndr	acterization of human cardia ome", <i>Proc. Natl. Acad. Sci.</i>	ac Na⁺ channe USA, Nov. 19	l mutations in the 96; 93:13200-13205				
			WAN	IG, Q. et ited cardi	al. "Cardiad ac arrhythn	sodium channel mutations inia", Human Molecular Gene	in patients with	n long QT syndrome, an 9):1603-1607				
						ar genetics of long QT synd 97; 12:310-320	rome from ger	nes to patients", Current				
			WAN	IG, Q. et e cardiac	al. "Positior arrhythmia	nal cloning of a novel potassi s", <i>Nature Genetics</i> , Jan. 19	um channel g 96; 12:17-23	ene: KVLQT1 mutations				
			WAN QT S	IG, Q. et lyndrome	al. "SCN5A ", <i>Cell</i> , Mar	Mutations Associated with a ch 10, 1995; 80:805-811	an Inherited Ca	ardiac Arrhythmia, Long				
			WAN Synd	IG, Z. et a	al., "Functio J. Cardiova	nal Effects of Mutations in K sc. Electrophysiol. 10(6):817	vLQT1 that Ca -826, 1999.	ause Long QT				
			Patie	nts with L	RICHAIGO ong QT Sy 1999; 86:47	DN, D. et al. "Sodium Chann ndrome: Identification of Two 0-476	el Abnormalition Novel SCN5	es are Infrequent in A Mutations", Am. J.				
Examine Signature			9	elia	and.	Louaya	Date Considered	9/22/03				

Signature Considered Considered, whether or not citation is fin conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*Applicant is to place a check mark here if English language Translation is attached.

					Complete if Known		
				Application Number	09/840,125		
		ON DISCLOS		Filing Date	24 April 2001	<u> </u>	
STATE	:MEN	PAEMBERIC	ANI	First Named Inventor	Igor SPLAWSKI	<b>₹</b> ∑	
	10	- 7 nom "		Group Art Unit	1655 1634 NEA . OOT		
	( 0	EC 27 2001		Examiner Name	1000/200		
Sheet	1,0	To THE WAY	9	Attorney Docket Number	Complete if Known  09/840,125  24 April 2001  1gor SPLAWSKI 450  1656 1634  2323-158		
		OTHER F	RIOR ART	- NON PATENT LITERAT			
Examiner Initials* Cite Include name of the author (in CAPITAL LETTERS), little of the article (when appropriate), title of the inem (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published							
P				Long-QT Syndrome Cause diac Na* Channel", Circulati	d by a Novel Mutation in a Conserved ion, 1999; 99:3165-3171		
		Congenital Lo	ng QT Syn		With Recessive and Dominant le Hearing Phenotype Associated with		
			tions found		of dominant and recessive KVLQT1 K*nias", <i>Human Molecular Genetics</i> , 1997		
					n (R1623Q) of the <i>SCN5A</i> Gene in a um. Mutat. 11(6):481, 1998, Abstract.		
		YANG, WP. cardiac arrhyti	et al. "KvL0 hmias", <i>Pro</i>	QT1, a voltage-gated potass c. Natl. Acad. Sci. USA, Ap	ium channel responsible for human ril 1997; 94:4017-4021		
					el mutations in Romano-Ward and ias", Accession No. AF000571; 3 pp.		
			. U86146; Yang, W.P. et al. "KvLQT1, a nan cardiac arrhythmias", 2pp.				
		http://www.nct	oi.nlm.nih.g	ov; OMIM Entry 600163; 11	рр.	T	
J		http://www.ncb	oi.nlm.nih.g	ov; OMIM Entry 192500; 27	рр.		
						T	
Examiner	T	Oalio	0	1910.10	Date 9/22/03		

4 5 1 3

Signature

\*\*EXAMINER: Initial if reference considered, whether or not citation is/n conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

\*\*Unique citation designation number. \*\*Applicant is to place a check mark here if English language Translation is attached.